NCDENR

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Dexter R. Matthews
Director

Pat McCrory
Governor

John E. Skvarla, III
Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Billingsley Septic Tank Co.
Wayne Billingsley
149 Penn Road
Reidsville, NC 27320

is hereby permitted to operate Septage Land and Application Site with permit # **SLAS-79-06** located on SR#2600 in Rockingham County in approximate position 36.28947° N latitude and -79.63267° W longitude. This site is permitted only for operations that are conducted in accordance with the representations made in the approved application, with all conditions attached to this permit, and with all of the provisions of 15A NCAC 13B.0800 -- Septage Management. Failure to operate as permitted may result in the Department suspending or revoking this permit, initiating action to enjoin the unpermitted operation, imposing administrative penalties, or invoking any other remedy as provided in Chapter 130A, Article 1, Part 2 of the North Carolina General Statutes.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued 4/9/2013

Martin A. Gallagher, Branch Head
Composting & Land Application Branch

CONDITIONS OF OPERATING PERMIT

1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards both surface and ground waters.

2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Wayne Billingsley and approved by the Division of Waste Management. **The 10.5-acre site shall remain established in fescue and is managed as one field.** The fescue shall be harvested as hay in May and September or October of each year. **The 30 day waiting period between the last application of septage and the harvest of a crop shall be maintained.** The 30 day waiting period between the last application of septage and the harvest of a crop shall be met by taking all septage to land application site (permit #SLAS 79-02), detention facility (#SDTF 79-02) or a wastewater treatment plant during the 30 days before each harvest. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.

3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Wayne Billingsley in such a manner as to prevent the migration of wastes off of the designated waste receiving site. A 5 buffer of fescue shall remain around the perimeter of the permitted site. Any site improvements noted in the plan must be installed within 30 days of plan approval. The installation of groundwater monitoring wells shall be required as deemed necessary by the Division.

4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other local, state, and federal government agencies which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the Federal Regulations listed in the Code of Federal Regulations, 40 CFR Part 503.

5. This permit may be modified or reissued at any time to incorporate any conditions, limitations and/or monitoring requirements the Division deems necessary to adequately protect the environment and public health.

6. **This site is only permitted for the land application of domestic septage and grease septage.** Domestic septage pH shall be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application.

7. **This site contains approximately 10.5 acres that are available for land application of septage.** The maximum annual application rate shall be 50,000 gallons per acre per year, for a total, **maximum annual application rate of 525,000 gallons.** This application rate assumes equal septage distribution, on an annual basis, over the permitted area. Monthly septage applications shall not exceed the monthly relative application rates given in the approved nutrient management plan for the site.

8. An approved above ground septage detention system with a minimum design capacity of 10,096 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.

9. Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete.

10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.

11. Septage shall not be applied during periods of high soil moisture. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.

12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.

13. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee or an employee of the firm named in this permit shall discharge septage at this site without prior appropriate notification and written approval from the Division.

14. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure. This permit is non-transferable.

15. **This permit shall expire on April 9, 2018.** Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838 (e)(1) of the NC Septage Management Rules and the Code of Federal Regulations, 40 CFR Part 503.17 (b).

16. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division upon request.

17. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.

18. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site. Boundaries of the permitted septage land application fields shall be clearly marked on the ground.

19. The areas that can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line, within 100 feet of any ditch or within 200 feet of any surface water unless specified otherwise.

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Dexter R. Matthews
Director

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Secretary

April 9, 2013

Mr. Wayne Billingsley
Billingsley Septic Tank Co.
149 Penn Road
Reidsville, NC 27320

RE: SLAS permit renewal
Billingsley Septic Tank Co.
SLAS-79-06
SR#2600 in Rockingham County

Dear Mr. Billingsley:

The NC Division of Waste Management has reviewed your application to renew a Septage Land Application Site permit in Rockingham County. Your application has been approved and your permit, # **SLAS-79-06**, is enclosed. If you have any questions about your permit, we'll need the number in order to answer your questions.

Please read all of your permit conditions carefully. Your nutrient management and soil erosion and runoff control plans have been included in your permit's conditions. In particular, review Permit Condition 15, which states that you will need to submit septage application logs for your site in order to renew your permit. These logs need to cover the entire time your current permit is valid. For details on the information you should include, consult the NC Septage Management Rule 15A NCAC 13B .0838(e)(1) and the Federal register's 40CFR Part 503.17(b). This permit condition also states that this permit is valid until April 9, 2018. If you have any questions, please ask for assistance as rule violations could expose you to administrative penalties.

Please note that to land apply industrial or commercial septage at a permitted septage disposal site you must have prior approval from the NC Division of Waste Management. The waste must be sampled prior to being removed from the system. Generally, the Division will request that you have a waste analysis run on septage from each commercial or industrial septage generator before that type of septage is approved for land application.

Use of a land application site or septage detention or treatment facility that is not permitted may result in administrative penalties up to $15,000 per violation in accordance with NC General Statute 130A-22.

If you have any questions, please contact me at (910) 433-3352 or Martin Gallagher at (919) 707-8280.

Sincerely,

Connie Wylie, Soil Scientist
Composting & Land Application Branch

APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
401 Oberlin Rd., Ste. 150, Raleigh, N.C. 27605

I. Site and Operator Information

1. Applicant Billingsley Septic Tank Co.
   Address 149 Penn Rd.
   Reidsville NC 27320
   Phone (336) 342-0608

2. Contact person for site operation (if different from applicant): Wayne Billingsley + Brenda B. Williams
   Title or position owners Phone (336) 342-0608
   Address 149 Penn Rd.
   Reidsville, NC 27320

3. Landowner Billingsley Assoc. LLC
   Address 149 Penn Rd
   Reidsville, NC 27320

4. Site Location: County Rockingham State Road Number 2600
   Directions to site: Take 87 North to Reidsville, Turn Left on Mizpah Ch. Rd. past 1071 Mizpah Ch. Rd. take next driveway to the right.

5. Indicate whether request is: new ✓ renewal _____ modification _____

   For a permit renewal or modification, provide the following information:
   Existing site permit number: SLAS-79-06 permit expiration date: 1-24-2013

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 17.31 acres.

7. Substances other than septage or grease trap pumpings previously disposed of on the site: (a) None XX, or (b) Attach a list indicating other substances, the amounts discharged, and the dates of discharge.

8. Attach written, notarized landowner authorization to operate a septage disposal site signed by the landowner (if the permit applicant does not own the property). ***If a corporation owns the land use a corporate landowner authorization form. If limited liability company owns the land, use a limited liability company landowner authorization form.***

9. Attach site evaluation report, including aerial photograph and soil analysis with metals results, unless the Division prepared the report.

10. Attach a vicinity map (county road map showing site location).

(over)

II. Site Management Information:

The following information shall be included with the application form:

1. Nutrient Management Plan
2. Soil Erosion and Runoff Control Plan

3. Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): City of Eden, Mebane Bridge Water Reclamation Plant.

4. Types of septage proposed to be discharged at the site (check all that apply):
   (a) Domestic septage pumped from septic tanks XX
   (b) Grease trap pumpings XX
   (c) Portable toilet waste_____
   (d) Commercial / Industrial septage_____

5. Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary): Lime stabilized to a pH of 12 for septage application. Septage will be lime stabilized for 30 min and grease for 2 hr to a pH of 12 prior to application.

6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Sprayed from pumper truck using splash plate to provide a uniform distribution of septage across the site.

7. Demonstration from the appropriate state or federal government agency that the land application site complies with the Endangered Species Law ** or if any part of the site specified is not agricultural land (use additional paper to explain if necessary): This site is agriculture land.

III. Certification

I hereby certify that:

1. The information provided on this application is true, complete, and correct to the best of my knowledge.
2. I have read and understand the N.C. Septage Management Rules, and
3. I am aware of the potential consequences, including penalties and permit revocation, for failing to follow all applicable rules and the conditions of a Septage Land Application Site permit.

Wayne Billingsley
Signature***

3-26-13
Date

Wayne Billingsley
Print name

Co-owner
Title

Note: This application will not be reviewed until all parts of the application are complete.
*** Refer to Section .0821(e) of the N.C. Septage Management Rules.**
**** Refer to Section .0821(g) of the N.C. Septage Management Rules.**
*****Signature of company official required.**

Limited Liability Company Landowner's Authorization to Operate a Septage Land Application Site
North Carolina Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
401 Oberlin Road, Suite 150, Raleigh, NC 27605

I hereby certify that the undersigned limited liability company, Billingsley Assoc. LLC, owns 56 acres of land located on Mizpah Church Rd. Reidsville, NC and identified by Parcel # 174281 (book and page of recorded deed or tax map parcel) and that the limited liability company agrees to allow Wayne Billingsley of Billingsley Septic Tank Co. (operator name) to use said land for application of septage for a period of 20 years (indicate time period) beginning 1-25-13 (give date), and that on behalf of the limited liability company, I have read the North Carolina Septage Management Rules*, and Billingsley Assoc. LLC (name of limited liability company) understands and agrees to maintain the restrictions on land use after septage application ends**. Billingsley Assoc. LLC (name of limited liability company) further understands that no septage may be land applied until the Division of Waste Management has issued a permit for a septage land application site. The above described property is owned solely by the undersigned limited liability company, or jointly with (name all co-owners, or state none) _____.

Date: 9-20-12

Billingsley Assoc. LLC
Limited Liability Company (Print Name)

Brenda B. Williams, Brenda B. Williams
Signature (Authorized Member or Manager) Print Name and Title

Member of LLC

North Carolina
Rockingham County

I, Cindy B. Strader, a Notary Public for said County and State do hereby certify that Brenda B. Williams (name of authorized member or manager of limited liability company) personally appeared before me this day and, being first duly sworn, acknowledged that he (she) is a (the) member (member or manager) of Billingsley Assoc. LLC, a limited liability company, and that by authority duly given and as the act of the limited liability company, the foregoing instrument was signed in its name by its authorized member (member or manager), and that the statements contained therein are true. Witness my hand and official seal, this the 20th day of September, 2012.

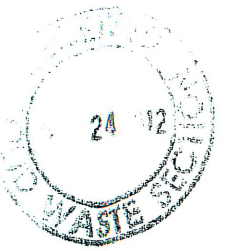
Cindy B Strader
Notary Public
My Commission expires: 12-4-2016

(OFFICIAL SEAL)

CINDY B. STRADER
NOTARY PUBLIC
Rockingham County, North Carolina
My Commission Expires 12-4-2016

*15A N.C. Admin. Code 13B Section .0800
** As required by Rule .0826

BILLINGSLEY SEPTIC TANK SERVICE
NUTRIENT MANAGEMENT PLAN FOR
SEPTAGE APPLICATIONS TO TALL FESCUE



A. General Information:

1. The cleared field contains ~~44.67~~ 10.5 useable acres and the useable wooded section (occurring in 2 separate areas) contains a total of 5.64 acres. The attached copy of the aerial photograph for the site shows field boundaries and identifications.

2. The dominant soil series for both the field and wooded areas is Casville sandy clay loam, 2-8 percent slopes, eroded.

3. The limiting nutrient designed for the site is nitrogen.

   a. Cleared field: The RYE for the cleared field is 4 tons/acre for fescue hay with an N factor of 44 pounds per ton of yield, equaling an N rate of 176 pounds N/acre. Note that this RYE is for uneroded Casville soils, and as such a reduction of 5% of the RYE is recommended, lowering the N rate to 167 pounds N/acre. At a standard septage rate of 2.6 pounds N/1000 gallons, this equates to a septage application rate of 64,230 gallons per acre per year. The calendar year for fescue starts July 1 and ends June 30. *Note that an application rate of 50,000 gallons per acre can only be exceeded with prior approval from the Solid Waste Division and with management from a certified land application operator.*

   Septage application to cleared, fallow fields prior to planting is generally limited to row crop fields. Thus, the fescue crop must be established prior to septage application.

   Woods: No RYE calculation is used for wooded sites. A standard 60-80 pounds N/acre recommendation is appropriate based on nutrient management manuals and discussion with foresters. A rate of 70 pounds N/acre will be used for this plan. The calendar year for trees is January 1 to December 31. The application rate for 70 pounds N/acre-year with the standard septage rate of 2.6 pounds N/1000 gallons is 27,000 gallons per acre per year.

   Septage application into wooded tracts is generally limited to plantation- style managed woodlots. Your tract may qualify for this application and you should seek guidance from the Solid Waste staff at the site evaluation for use of these areas. These areas may also be converted to cleared fields, and as such all other comments in this report shall relate to those areas with respect to application rates and erosion control.

4. Septage will not be applied where the site is untrafficable (untrafficable is defined as soil that will allow a loaded truck to leave a depression in sod greater than 3 inches in depth). As these soils are well drained with good surface and internal drainage, that should only occur after heavy or prolonged periods of rain or snow.

5. All nitrogen recommendations for forages will be 75% of the realistic yield expectation nitrogen rate should the forage be grazed. Thus- the grazing rate is 0.75 x 167#N/acre = 125 pounds N/acre-year which equates to 48,000 gallons septage per acre per year.

7. Septage storage shall be provided to account for the average volume of septage pumped per week, or an alternative plan, such as disposal at a waste treatment plant, should be in place.

B. Crops to be grown and approximate planting times:

1. The cleared field, including buffer zones, will be seeded in tall fescue at a rate of 20-25 lbs seed/acre broadcast in September of 2010 in order to establish a permanent stand. A follow-up seeding may be required in March of 2011, pending yield and stand quality from the 2010 seeding. A thicker and more robust stand may be realized by increasing the seeding rate up to 40 lbs/acre. If the preferred seeding method is drilling, then 15-20 lbs seed/acre are recommended, but better coverage can also be realized by increasing this rate. The recommended fertilizer and lime as per the NCDA&CS soil test should be applied prior to planting, and traffic minimized on the site. This may include restricting access to hunters who may damage and rut the site with their vehicles. If a broadcast seeding method is used, very light tillage and/or cultipacking is necessary to establish good seed-soil contact.

Areas that develop with less than 80% groundcover by fescue will be re-seeded with fescue at a rate of 15-20 lbs seed/acre broadcast in [redacted]1. This seed should not be tilled, but depending on moisture status, a light rolling may be needed. Further advice may be sought through the Cooperative Extension Service or NCDA&CS regional agronomist.

(Sept - Oct)

2. The wooded area should not receive any soil amendments, as uniformity would not be consistent. If the Solid Waste Division calls for a minimum soil pH, then an application of lime broadcast can be performed. It will take a year or more for this lime to react in the broadcast mode.

C. Limiting Nutrient application rate for crops grown:

1) Cleared Field - RYE = Realistic Yield Expectations

Crop	RYE		Limiting Nutrient App. Rate		lbs N/acre
Tall fescue hay	4.0 tons/acre	x	44 lbs N/dry ton	=	176
Reduction for past erosion of 5%:	0.95	x	176	=	167
Reduction if grazed:	0.75	x	167	=	125

2) Woods

Crop	RYE	Limiting Nutrient App. Rate	lbs Nutrient/acre
Mixed woods	NA	NA	70

D. Relative application rates for cleared field and wooded site:

Month	Site	
	cleared	wo[redacted]ds
January	Low	No[redacted]e
February	Medium	No[redacted]e
March	High	Lo[redacted]
April	High	Me[redacted]um
May	Medium	Me[redacted]um
June	Low	Me[redacted]um
July	Low	Me[redacted]um
August	Low	Me[redacted]um
September	Medium	Me[redacted]m
October	Medium	Lo[redacted]
November	Medium	No[redacted]
December	Low	Nor[redacted]

Description of terms: None = 0 gallons; Low = 5,000 gallons
Medium = 10,000 gallons; High = 15,000 gallons These are maximum application amounts, per acre per month. ***Cumulative yearly application rate is not to exceed the permitted application rate.***

E. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by broadcast septage application. Should there be an interest in injecting or incorporating the septage, the application rates will be lowered and must be adjusted. Septage injection must be performed with special equipment so as to not injure the crop stand. Discuss this option with the Solid Waste Management staff prior to investing in injection equipment.

F. Additional Fertility Requirements (not including the limiting nutrient from the waste stream)

Nitrogen, phosphorus and / or potassium will be added in accordance with the soil test results for the crops grown in order to achieve realistic yield expectations based on the soil at the land application site and nutrient loading rates. Soil pH shall be amended as recommended in the soil test report. PLEASE NOTE THAT LIME-AMENDED SEPTAGE WILL RAISE SOIL pH. YOU SHOULD CLOSELY MONITOR SOIL pH AND ALSO HAVE THE SEPTAGE CHECKED FOR ITS LIME VALUE TO INSURE THAT THE SOIL pH DOES NOT BECOME TOO HIGH. THE COST OF SEPTAGE ANALYSIS FOR LIME VALUE IS CURRENTLY $10.00 WITH THE NCDA&CS LABORATORY.

The buffer areas should be fertilized with approximately 120 lbs/acre/year of N, 40 lbs/acre/year of P_2O_5 , and 80 lbs/acre/year of K_2O or based on soil test results (sample the buffer areas separately for future soil testing).

G. Harvest of the crops and their use:

1. The fescue will be cut as hay and baled whenever it reaches approximately 12 inches in height or just before seedhead emergence. This will usually take place in late May and again in September or October. At least three fescue harvests will be made each year depending on environmental conditions.

2. A 30-day waiting period must be observed between the last application of septage and harvest.

3. The hay will be sold to a local farmer to feed his beef cows and horses.

H. Yield Documentation, Nutritive sampling, Nutrient Loading Logs:

1. Each harvest will be documented and the yield recorded in cooperation with the County Extension Office. If assistance from the County Extension Office is not available 10-15% of each harvest will be sampled to obtain a representative sample for nutritive analysis. The total yield will also be documented based on actual weight of the harvested material rather than estimates from harvesting equipment manuals. A subsample of 10-15% of the harvested material can be used for yield determination. A copy of the nutritive analysis and yield documentation should be mailed to the Division after each harvest. Nutrient loading logs will also be submitted to the Division each month listing the gallons / type of waste discharged, lbs of nutrients applied (this event), lbs of nutrients applied (year to date), total gallons applied (year to date), and pH at application.

SOIL EROSION AND RUNOFF CONTROL PLAN

This site is to be managed in permanent fescue grass and woodland. The maximum slope on the cleared field is 12 percent. This occurs in the northeastern corner of the field. Downslope grassed buffer will exceed 200 feet as the 500-foot home setback extends well into the field. The remainder of the field has complex topography with slopes ranging mainly from 4 to 8 percent. Surrounding the field, the required 5-foot grassed buffer will be maintained. Further, the closest intermittent surface water is over 100 feet into the woods. The wooded areas, should they be used, are limited to the ridges with gentle slopes of 1 to 4 percent.

Despite the fact that sufficient erosion control should be experienced with permanent fescue cover, the operator/site manager is strongly encouraged to use judgment in deciding when and where to apply septage. The steeper slopes should be saved for the driest periods. If there is any chance of forthcoming rain within 24-48 hours, the manager should use the slopes less than 6 percent or the wooded areas. The quality of the fescue stand should dictate when and how much septage is applied. Lighter applications are warranted when the nutrient management plan calls for low applications or when the threat of septage runoff off the site is higher. The operator should calibrate and test the spreading equipment such that they are familiar with speeds and settings to apply appropriate application rates. Regular review of the fescue stand quality is critical to maintain forage health and adequate erosion control. At the first sign of plant stress, both soil tests and plant tissue analyses are encouraged to provide for sound management decisions. The fescue should be fertilized with septage and/or commercial fertilizer to maintain a good sod base across the application area and in buffer areas.

Submitted by: Wayne Billingsley Date: 3-26-13
Site Operator

Plan prepared by: Karl Shaffer, L.S.S., Certified Technical Specialist - Nutrient management Planner Date: February 13, 2010 Karl Shaffer

Address: 685 Sanford Road

Pittsboro, NC 27312

Phone: (919) 542-5803, (919) 244-1984

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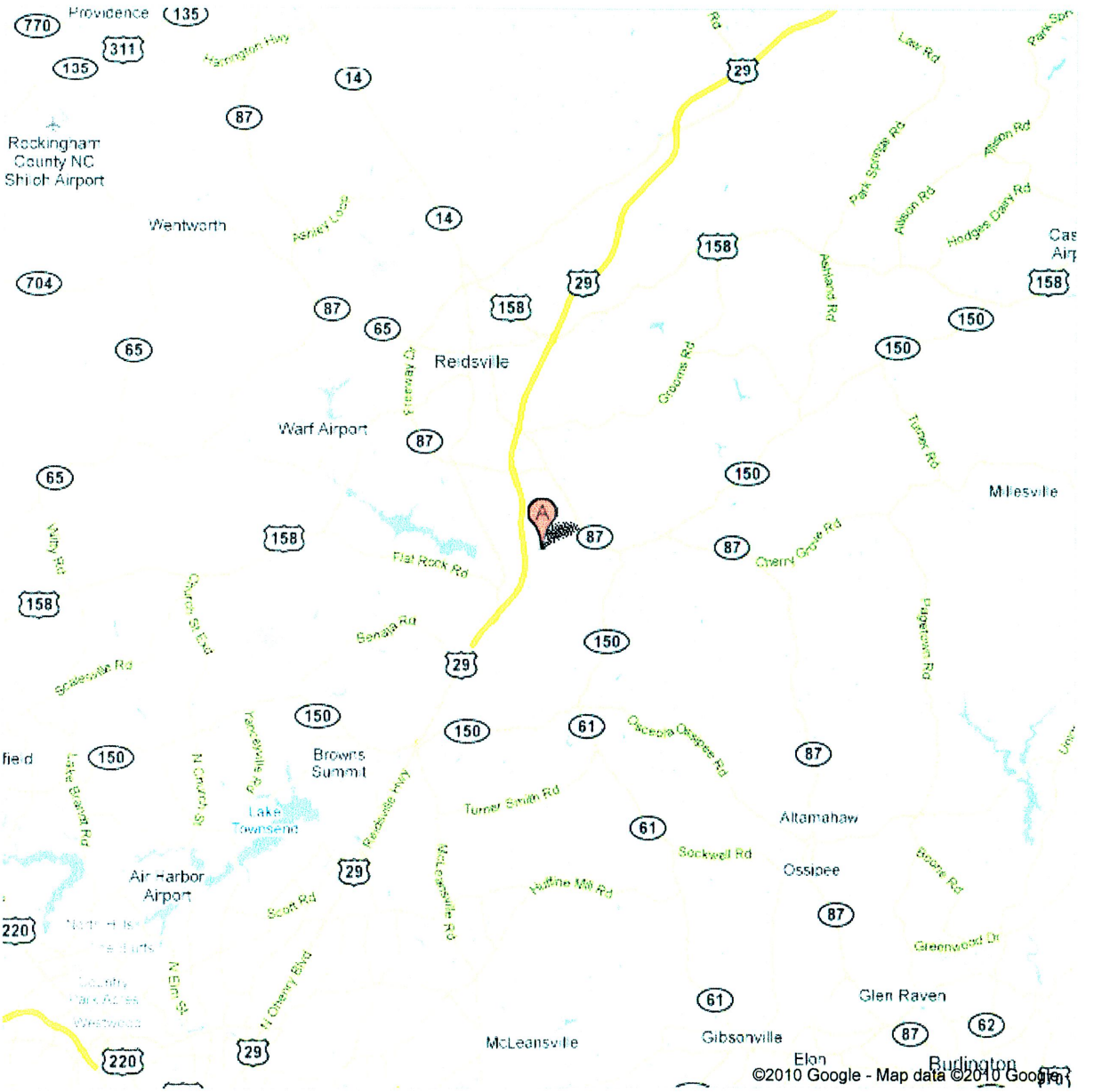
Only the cleared area shall be utilized at this time (not the wooded area).

This site shall be rotated with the septage land application site permit SLAS#79-02 in regards to the 30 day waiting period between the last septage application and the harvest of the crop. Septage detention facility SDTF#79-02 is also available as an alternate disposal location.

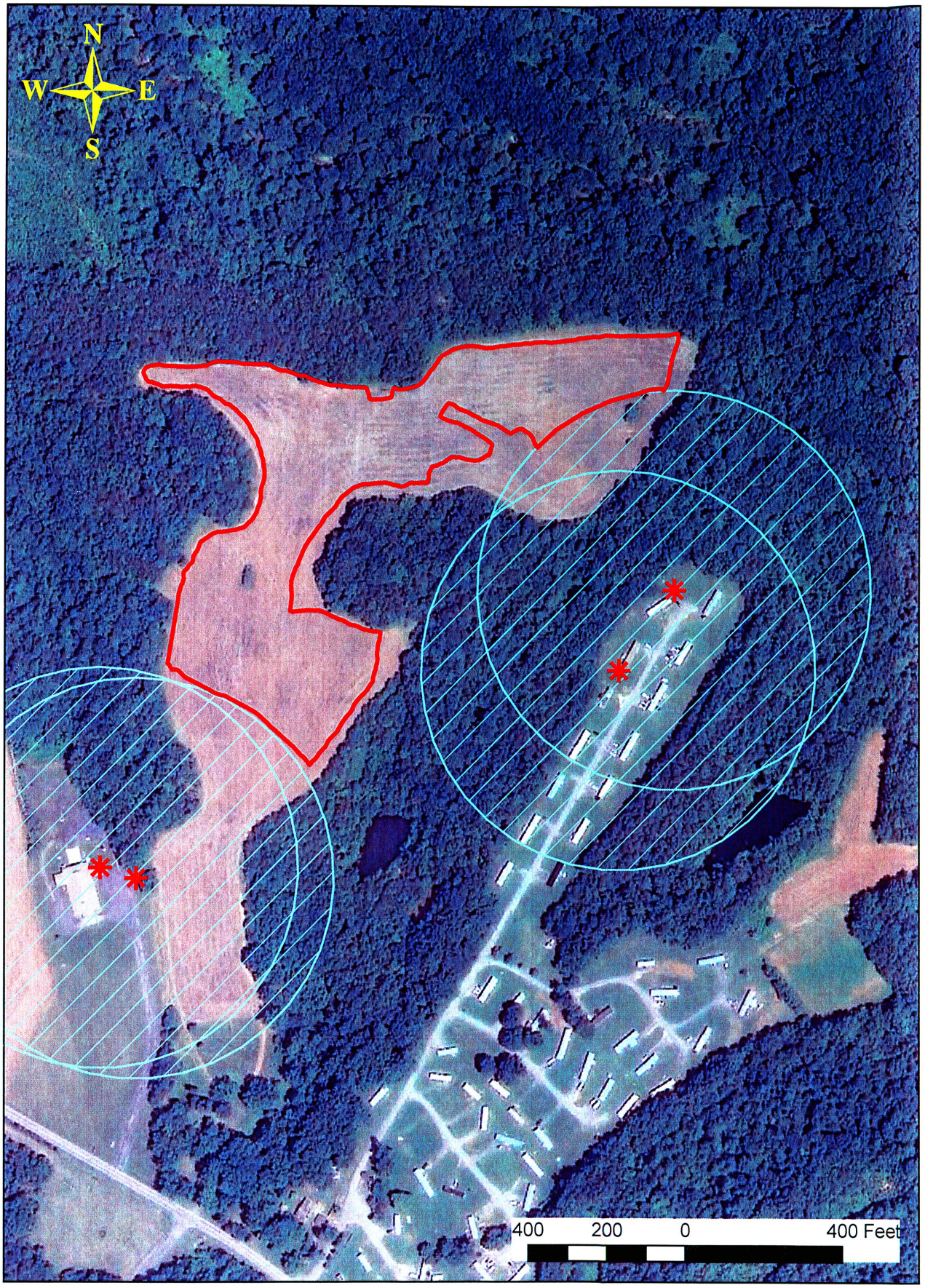
Weed control may be needed in order to maintain 80% groundcover and to produce the realistic yield expectations for the approved cropstand. Weed control may be obtained through different methods (mowing or herbicides) or a combination of methods. For specific recommendations, proper identification of the weed or weeds is necessary. The local cooperative extension agent or regional agronomist may be contacted for advice.

Google maps Address **1071 Mizpah Church Rd**
Reidsville, NC 27320



36.28947°N latitude
-79.63267°W longitude

SLAS-79-06



Source: 2010 NAIP Color Imagery, NCDA; site boundary, NC DENR Division of Waste Management.
Map created by NC DENR Division of Waste Management, Compost and Land Application Branch for permitting purposes only.

crc, Jan. 2012